



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

ATTY.'S DOCKET: LOY=1

In re Application of:) Art Unit: 2122
Irit LOY et al.) Examiner: C. O. Kendall
Appln. No.: 09/887,550) Washington, D.C.
Filed: June 25, 2001) Confirmation No. 5848
For: DATA MANAGEMENT) April 5, 2005
APPLICATION PROGRAMMING)
INTERFACE SESSION ...

RESPONSE

Customer Window, Mail Stop Amendments
Randolph Building
401 Dulany Street
Alexandria, VA 22314

Sir:

In response to an Official Action dated January 6, 2005, Applicant respectfully submits the following remarks. This application contains claims 1-57, all of which were finally rejected in the present Official Action. Reconsideration is respectfully requested in view of the remarks that follow.

Applicant thanks Examiners Kendall and Dam for the courtesy of an interview granted to Applicant's representative, Daniel Kligler (Reg. No. 41,120) in the USPTO on March 17. At the interview, Applicant's representative explained the distinction of the present invention over Ivanoff et al. (U.S. Patent 5,517,622). Specifically,

Applicant's representative explained the meaning of a "parallel file system," as defined in the present patent application and recited in all the pending claims, and pointed out that Ivanoff does not disclose any sort of file system, let alone a parallel file system. The Examiner agreed that he would reevaluate the question of whether Ivanoff discloses a parallel file system and, if not, the final rejection would be withdrawn. Applicant's representative further explained that even if there were some element in Ivanoff that the Examiner found to be analogous to a parallel file system, Ivanoff still could not be considered to disclose all the elements of the claims.

Claims 1, 2, 6, 9-21, 25, 28-40 and 47-57 were rejected under 35 U.S.C. 102(b) over Ivanoff. Applicant respectfully traverses this rejection.

Claim 1 recites a method for managing data storage in a cluster of computing nodes. The nodes have shared access to data storage using a parallel file system. One of the nodes in the cluster is chosen to serve as the session manager node, while a second node is selected to serve as a session node for a data management (DM) application that runs on one or more of the volumes of data storage using the parallel file system. A session of the DM application is created by sending a message

from the session node to the session manager node. This message causes the session manager node to inform the other nodes in the cluster about the session. As a result, the session node receives events from the nodes in the cluster for processing by the DM application when the nodes access the one or more volumes of data storage using the parallel file system.

Ivanoff describes a method and apparatus for pacing communications in a distributed, heterogeneous network. Ivanoff's method uses communication managers, which reside in local processors and are responsible for interfacing local end-users with the remainder of the network (abstract). In rejecting the claims in the present patent application, the Examiner made reference specifically to Ivanoff's Fig. 6, which illustrates the functions of the communication manager in terms of a network protocol stack (col. 11, lines 54-59). The CM interacts with the session layer of the protocol stack (col. 37, lines 22-36, and col. 38, line 60 - col. 39, line 42). One aspect of management services performed by the CM includes event management (col. 66, line 18 - col. 67, line 57).

In the Response to Arguments in the present Official Action, the Examiner stated that Ivanoff's "communication

manager" and "adjacent communication manager" (described by Ivanoff in col. 3, lines 40-50) are equivalent to the parallel file system recited in the claims of the present patent application. Applicant has difficulty in understanding this statement in light of the explicit definition of a "parallel file system" given in the specification of the present patent application: A parallel file system is "a PFS [physical file system] running on a cluster of nodes, which enables all nodes in the cluster to access the same file data concurrently" (page 17, lines 12-14).

Even if this explicit definition were disregarded, the Examiner's interpretation of the term "file system" does not appear to have anything to do with files or systems that are used to keep track of them. As noted in MPEP 2111.01:

"Claims are not to be read in a vacuum, and limitations therein are to be interpreted in light of the specification in giving them their 'broadest reasonable interpretation'." [*In re Marosi*, 710 F.2d 799, 218 USPQ 289 (Fed. Cir. 1983), emphasis in original.]

Ivanoff describes a communication system. In his very lengthy specification, he makes no mention whatsoever of file systems.